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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/775,714

02/10/2004

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ISI0401

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06/07/2007

EXAMINER

WENDELL, MARK R

ART UNIT

PAPER NUMBER

3609

MAIL DATE

DELIVERY MODE

06/07/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/775,714

Applicant(s)

BLACK, ROY GARY

Examiner

Mark R. Wendell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/10/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

The claims are objected to because the lines are crowded too closely together, making reading difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).

The disclosure is objected to because of the following informalities: Page 3, line 11, the word "the" should be inserted between "onto foundation." Appropriate correction is required.

Claim Objections

Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-3, 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Rainbolt (US 6494006). Rainbolt illustrates in Figure 5 a system for controlling moisture (12) in a building wall having stacked straw bales (14) comprising:

- A foundation wall (10 and 40) having a generally horizontal surface at least as wide as the straw bales (14);
- A step (60) extending downwardly and away from the foundation wall (10 and 40).

Regarding claim 2, Rainbolt illustrates in Figure 5 a step (60) with an upper surface (53) that is below the horizontal surface of the foundation wall (40).

Regarding claim 3, Rainbolt illustrates in Figure 5 a foundation (10) and step (60) being integral and the foundation being formed of concrete.

Regarding claim 9, Rainbolt illustrates in Figure 5 a membrane (53) on the wall extending outwardly in the direction of the step (60) and abutting the upper surface forming a cold joint.

Claim Rejections - 35 USC § 103

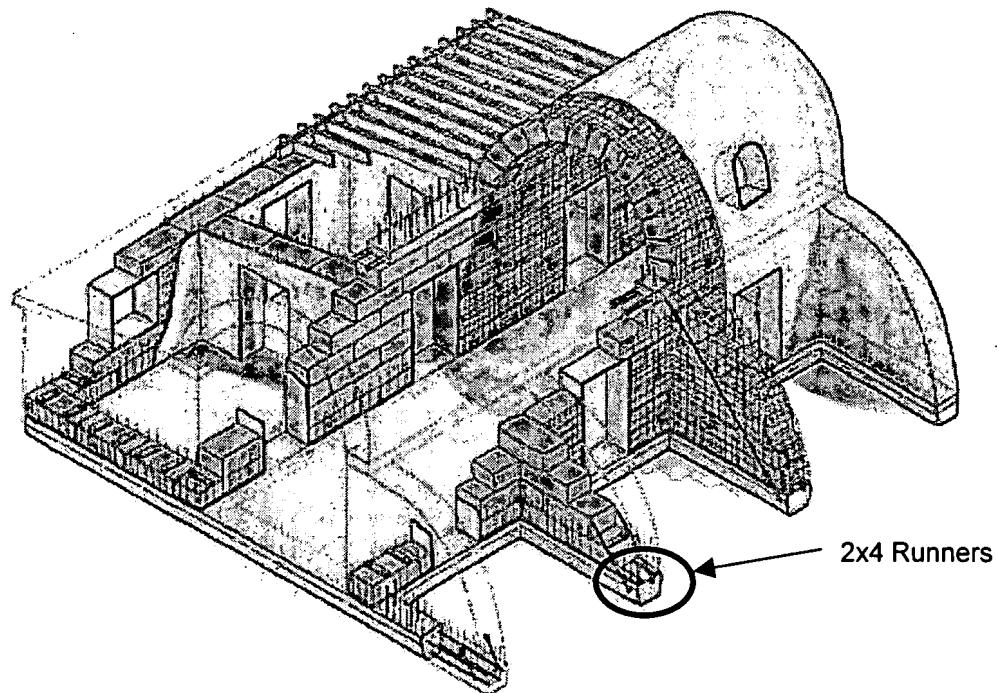
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rainbolt (US 6494006) in view of David Mar illustration (see below). The David Mar illustration shows a pair of spaced-apart runners (2x4's) attached to the foundation near its edges less than the width of a straw bale, creating a channel. The examiner notes that claim 4 is not definite and states that the straw bales "can" be supported on the said runners. It would be obvious to one of ordinary skill in the art, with the motivation of elevating the straw bales to keep them from resting in standing water, to modify the straw-bale system of Rainbolt with the runners of David Mar.



Straw-bale barrel vault house isometric. Recipient of the 2002 Innovative Design of the Year Award from the Structural Engineers Association of California. (Illustration by David Mar, S.E.; engineering by Tipping-Mar Associates; design by Skillful Means Construction.)

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rainbolt and David Mar illustration as applied to claims 4 and 5 above, and further in view of "Keeping Straw-bale Houses Warm and Dry." It is discussed above what is disclosed by Rainbolt and Mar, however neither teaches drain rock disposed in the channel between runners. The article "Keeping Straw-bale Houses Warm and Dry," published online in April of 2002, states that to keep ground water from getting into the wall, it is known "to raise bales off the ground and put a waterproof membrane or capillary break (like gravel) between the bales and the foundation." It would be obvious to one of ordinary skill in the art to modify the straw-bale system of Rainbolt and David Mar mentioned above with the waterproof membrane (sheet material) and capillary break

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taught in "Keeping Straw-bale Houses Warm and Dry," to keep ground water from getting into the wall.

Regarding claim 8, it would have been obvious to one having ordinary skill in the art at the time of invention was made to include building paper as the underlying waterproofing medium, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice (*In re Leshin*, 125 USPQ 416). The examiner notes that building paper is a commonly used waterproofing sheet material and is used in many facets of waterproofing such as underlying hardwood floors in housing.

Claims 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rainbolt (US 6494006) in view of Rainbolt (US 6038820). It is discussed above what is disclosed by Rainbolt (US 6494006), however Rainbolt does not teach a bond beam disposed above and spaced apart from the bales creating an airspace at the top of the wall. Rainbolt (US 6038820) teaches in Figure 1 and Column 1, lines 47-49, an attic region in straw bale homes. It is common knowledge within the art of building construction that an attic space is divided from the inner walls via a bond beam, thus creating an air space. It would obvious to one of ordinary skill in the art to modify the straw-bale housing system of Rainbolt (US 6494006) by adding the attic illustrated in Rainbolt (US 6038820) to create storage space within the dwelling.

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Claims 12-14, 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rainbolt and Rainbolt as applied to claim 11 above, and further in view of Mueller (US 4214511). It is discussed above what is disclosed by Rainbolt and Rainbolt, however neither teaches a plenum above the bond beam defining an air space. Mueller, in column 1, lines 11-14, teaches an upper plenum provided with one or more vents to the atmosphere. It would have been obvious to one of ordinary skill in the art to modify the straw bale housing system of Rainbolt and Rainbolt to include the upper plenum and vents of Mueller to provide for increased ventilation and clean air within the housing structure.

Regarding claims 13 and 17, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the U-shaped plenum (like that illustrated in Figure 1 of Mueller (24)) of galvanized metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice (In re Leshin, 125 USPQ 416).

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rainbolt (US 6494006). Rainbolt illustrates in Figure 5 a vertical wall having a core of straw bales (14) stacked on a foundation wall (10 and 40) creating a sump at the bottom of the wall providing a path for the water in the sump to exit (see modified figure below).

The combination renders the claimed method steps obvious since such would be logical manner of using the combination.

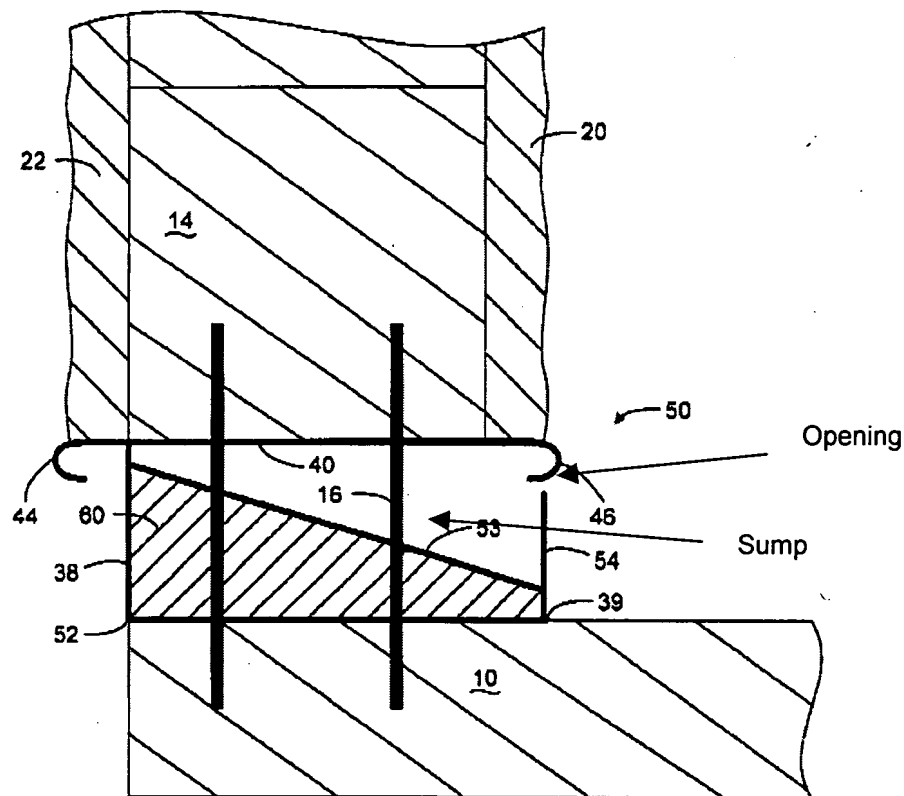


Figure 5 of Rainbolt (US 6494006)

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rainbolt and Rainbolt as applied to claim 11 above, and further in view of Mueller (US 4214511). It is discussed above what is disclosed by Rainbolt and Rainbolt, however

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neither teaches a plenum above the bond beam defining an air space. Mueller, in column 1, lines 11-14, teaches an upper plenum provided with one or more vents to the atmosphere. It would have been obvious to one of ordinary skill in the art to modify the straw bale housing system of Rainbolt and Rainbolt to include the upper plenum and vents of Mueller to provide for increased ventilation and clean air within the housing structure.

The combination renders the claimed method steps obvious since such would be logical manner of using the combination.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Canada (US 6061986) teaches a reinforced stucco panel and straw insulation wall assembly. Petersen (US 4048911) teaches an air supply / vent for a roof of a tractor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Wendell whose telephone number is (571) 270-3245. The examiner can normally be reached on Mon-Fri, 7:30AM-5PM, Alt. Fri off, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached on (571) 272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Victor Batson
Supervisory Patent Examiner
Art Unit 3609

MW
May 23, 2007